

Genomics-Enabled Drug Repurposing and Repositioning: A Workshop

June 24, 2013

**The Keck Center of the National Academies, Room 100
500 Fifth Street, NW
Washington, DC 20001**

Workshop Objectives:

- To assess the current landscape of drug repurposing activities in industry, academia, and government
 - To examine enabling tools and technology for drug repurposing
 - To evaluate the business models and economic incentives for pursuing a repurposing approach
 - To discuss how genomic and genetic research could be positioned to better enable a drug repurposing paradigm
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8:30–8:35 A.M.

Welcoming Remarks

Sharon F. Terry, *Roundtable Co-Chair*
President and CEO
Genetic Alliance

Geoffrey Ginsburg, *Roundtable Co-Chair*
Director, Genomic Medicine, Duke Institute for Genome Sciences & Policy; Executive Director, Center for Personalized Medicine, Duke Medicine; Professor of Medicine and Pathology, Duke University Medical Center

8: 35–8:40 A.M.

Charge to workshop speakers and participants

Aidan Power, *Workshop Chair*
Vice President and Head, PharmaTx Precision Medicine
Pfizer Inc.

SESSION I: CURRENT LANDSCAPE

Moderator: Gabriela Lavezzari, PhRMA

8:40–8:55 A.M.

State of the Science: Academia

Larry Sklar (*confirmed*)
Distinguished Professor
Director, Center for Molecular Discovery
Associate Director, Cancer Center
University of New Mexico School of Medicine

8:55–9:10 A.M.

State of the Science: Industry

Don Frail (*confirmed*)
Vice President of Science
New Opportunities Innovative Medicines Unit
AstraZeneca

9:10–9:25 A.M.

State of the Science: FDA

Weida Tong (*confirmed*)
Director, Division of Bioinformatics and Biostatistics
National Center for Toxicological Research
U.S. Food and Drug Administration

9:25–9:40 A.M.

State of the Science: Rare Disease

Hal Dietz (*confirmed*)
Victor A. McKusick Professor of Medicine and Genetics
Institute of Genetic Medicine
Investigator, Howard Hughes Medical Institute
Johns Hopkins University School of Medicine

9:40–10:20 A.M.

Discussion with Speakers and Attendees

10:20–10:35 A.M.

BREAK

SESSION II: ENABLING TOOLS AND TECHNOLOGY

Moderator: Geoffrey Ginsburg, Duke University

10:35–10:55 A.M.

Computational Strategies (modeling, literature based discovery)

Atul Butte (*confirmed*)

Chief and Associate Professor of Systems Medicine,
Department of Pediatrics,
Stanford University School of Medicine

10:55–11:15 A.M.

Data mining (post market surveillance, high throughput screening, databases)

Lon Cardon (*confirmed*)

Senior Vice President, Alternative Discovery and Development
GlaxoSmithKline

11:15–11:30 A.M.

Government sponsored efforts: NCATS

John McKew (*confirmed*)

Acting Director, Division of Pre-Clinical Innovation
National Center for Advancing Translational Sciences

11:30–11:45 A.M.

Government sponsored efforts: NINDS

Petra Kaufmann (*confirmed*)

Director, Office of Clinical Research
National Institute of Neurological Disorders and Stroke

11:45 A.M.–12:30 P.M.

Discussion with Speakers and Attendees

12:30–1:20 P.M.

WORKING LUNCH

SESSION III: VALUE PROPOSITION FOR REPURPOSING

Moderator: Allen Roses, Duke University

1:20–1:35 P.M.

Business Model/Economic Incentives

Michael Ringel (*confirmed*)
Partner and Managing Director
The Boston Consulting Group

1:35–1:50 P.M.

Repurposing drugs currently in development

Simeon Taylor (*confirmed*)
Vice President, Research and Scientific Affairs
Bristol-Myers Squibb

1:50–2:05 P.M.

Repurposing drugs that were not successful for their first indication

Thomas O. Daniel (*confirmed*)
Executive Vice President
President, Global Research & Early Development
Celgene Corporation

2:05–2:45 P.M.

Discussion with Speakers and Attendees

2:45–3:00 P.M.

BREAK

SESSION IV: POLICY APPROACHES AND LEGAL FRAMEWORK

Moderator: Arti Rai, Duke University

3:00–3:15 P.M.

Strategies for overcoming barriers to drug repurposing: NCATS

Christine Colvis (*confirmed*)
Director, Extramural Therapeutics Discovery
National Center for Advancing Translational Sciences

3:15–3:30 P.M.

Strategies for overcoming barriers to drug repurposing: MRC/AZ

Chris Watkins (*confirmed*)
Director, Translational Research and Industry
Medical Research Council

3:30–3:45 P.M.

Legal/IP

Arti Rai (*confirmed*)
Elvin R. Latty Professor of Law
Duke University

3:45–4:25 P.M.

Discussion with Speakers and Attendees

SESSION V: INCREASING THE EFFICIENCY AND SUCCESS OF REPURPOSING

4:25–5:15 P.M.

Advancing Repurposing Efforts

Moderator: Aidan Power, Pfizer Inc.

Respondents:

Ronald J. Bartek
President
Friedreich's Ataxia Research Alliance

Lon Cardon
Senior Vice President, Alternative Discovery and Development
GlaxoSmithKline

Christine Colvis
Director, Extramural Therapeutics Discovery
National Center of Advancing Translational Sciences

Hal Dietz
Victor A. McKusick Professor of Medicine and Genetics
Institute of Genetic Medicine
Investigator, Howard Hughes Medical Institute
Johns Hopkins University School of Medicine

Michael Pacanowski
Acting Associate Director for Genomics
Center for Drug Evaluation and Research
Office of Clinical Pharmacology
U.S. Food and Drug Administration

Arti Rai
Elvin R. Latty Professor of Law
Duke University

Michael Ringel
Partner and Managing Director
The Boston Consulting Group

SESSION VI: CONCLUSION

5:15–5:30 P.M.

CONCLUDING REMARKS

Aidan Power, *Workshop Chair*
Vice President and Head, PharmaTx Precision Medicine
Pfizer Inc.

5:30 P.M.

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